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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,173	01/18/2002	Brian J. Malone	01-1008-A	4542

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EXAMINER

CHOI, JACOB Y

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,173

Applicant(s)

MALONE ET AL.

Examiner

Jacob Y Choi

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10,12-23,25,26 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,12-23,25,26 and 28-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/18/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Any structural detail that is of sufficient importance to be described should be shown in the drawing (Ex parte Good, 1911 C.D. 43, 164 O.G. 739 (Comm'r Pat. 1911).) See MPEP 608.02. Therefore, applicant needs to shows a plurality of compartments, each compartment being generally concave, the conductive material and reflective coating are formed on the substrate within the same vacuum chamber, & the conductive material and reflective coating are formed on the substrate simultaneously in the same vacuum chamber.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (USPN 6,290,380).

Regarding claim 16, Suzuki et al. clearly discloses a conductive layer (figure 4) for one or more electrical circuits deposited directly (figure 3) on the substrate. Suzuki et al. discloses the claimed invention except for the conductive layer is 1 to 4 microns thick. It would have been obvious to one having ordinary skill in the art at the time the

Art Unit: 2875

invention was made to specify workable range of the conductive layer on the substrate, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Note: it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018).

Regarding claim 16, either Hancox or Forish or Harris clearly discloses a conductive layer for one or more electrical circuits deposited on the substrate. Mentioned references disclose the claimed invention except for the conductive layer is 1 to 4 microns thick. It would have been obvious to one having ordinary skill in the art at the time the invention was made to specify workable range of the conductive layer on the substrate, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

5. Claims 17-23, 25, 26, & 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Suzuki et al. (USPN 6,290,380) or Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018).

Art Unit: 2875

Regarding claim 17, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this (conductive layer is formed by vacuum deposition of the electrical circuits on the substrate) limitation has not been given patentable weight.

Regarding claim 18, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the conductive layer is directly embedded in the substrate.

Regarding claim 19, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose one or more openings in the lamp housing for one or more light sources.

Regarding claim 20, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose one or more terminals attached to the conductive layer at the openings.

Regarding claim 21, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, except for the light sources comprise one or more light emitting diodes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilized LEDs rather than incandescent lamps, since the examiner takes Official Notice of the equivalence of LEDs and incandescent lamps for

Art Unit: 2875

their use in the vehicle lamp and the selection of any of these known equivalents would be within the level of ordinary skill in the art.

Regarding claim 22, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the light source comprise one or more incandescent lamps.

Regarding claim 23, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Forish and Harris disclose further comprising a reflective coating.

Regarding claim 25, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose further comprising a seal.

Regarding claim 26, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose further comprising a protective coating on the conductive layer.

Regarding claim 28, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose further comprising a single connection for electrically connecting the circuits to one or more power sources.

Regarding claim 29, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and

Art Unit: 2875

Forish and Harris disclose the housing comprises one or more molded channels to facilitate receipt of the conductive layer.

Regarding claim 30, either Suzuki et al. or Hancox or Forish or Harris discloses the claimed invention, explained above. In addition, Suzuki et al. and Hancox and Forish and Harris disclose the housing comprises one or more smooth corners to facilitate receipt of the conductive layer.

6. Claims 1-6, 8-10, & 12-15, & 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Suzuki et al. (USPN 6,290,380) or Hancox (USPN 4,246,632) or Forish (USPN 5,529,535) or Harris (USPN 4,047,018) as applied to apparatus claims 16-30 in above, and further in view of either Longueville et al. (USPN 5,785,534) or Crotzer et al. (USPN 5,977,489).

It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961). Also, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight. In addition, either Longueville et al. (column 7, lines 35-50) or Crotzer et al. (column 8, lines 10-60) teaches that it is known to apply electrical conductive to the substrate by utilizing spraying method. Therefore, it would have been obvious to deposit particles by direct metallization to form a layer of conductive material on a contoured surface of a substrate that forms part of the lamp housing, in order to

Art Unit: 2875

form part of one or more electrical spray circuits when the conductive material is connected to at least one or more power sources and one or more light sources & the direct metallization deposition of the layer of conductive material is deposited by vacuum deposition in a vacuum chamber & the layer of conductive material is deposited by sputter vacuum deposition & the layer of conductive material is deposited by cathodic arc vacuum deposition & the layer of conductive material is deposited by E-beam vacuum deposition & the layer of conductive material is metal & a step of forming distinct electrical pathways in the layer of conductive material during deposition & the distinct electrical pathways are formed by masking the lamp housing prior to deposition of the layer of conductive material on the lamp housing & a step of depositing a reflective coating on the substrate & a step of applying a protective coating to the conductive material & the step of depositing a conductive layer further comprises depositing one or more terminals for contacting the light sources & the step of depositing a conductive further layer comprises depositing at least one connection for electrically connecting the conductive layer to the power sources & the lamp housing is comprised of thermoplastic material & the contoured surface is comprised of a plurality of compartments, each compartment being generally concave & the conductive material and reflective coating are formed on the substrate within the same vacuum chamber & the conductive material and reflective coating are formed on the substrate simultaneously in the same vacuum chamber.

Response to Amendment

Art Unit: 2875

7. Examiner acknowledges that the applicant has amended claims 1, 2, & 16, canceled claims 7, 11, 24, & 27, and newly added claims 31-34.

Response to Arguments

8. Applicant's arguments with respect to claims 1-6, 8-10, 12-23, & 25-34 have been considered but are moot in view of the new ground(s) of rejection.

The amendment filed 08/28/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the ***original*** disclosure is as follows: the lamp housing is comprised of thermoplastic material, a plurality of compartments, each compartment being generally concave, the conductive material and reflective coating are formed on the substrate within the same vacuum chamber, & the conductive material and reflective coating are formed on the substrate simultaneously in the same vacuum chamber.

Applicant is required to cancel the new matter in the reply to this Office Action.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a conductive layer that is pre-formed on a circuit board or in a flexible flat circuit involves very different manufacturing consideration ... lamp assembly substrates are larger components, often contoured, which make positioned and even distribution more difficult ... etc) are not recited in the rejected claim(s). Although the claims are

Art Unit: 2875

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Note: on page 6-7, originally filed specification states that "spray circuit is applied to inner surface of housing by **one of various known methods** of vacuum deposition ... the LEDs are then soldered in place using **known methods** such as convection reflow ... etc.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

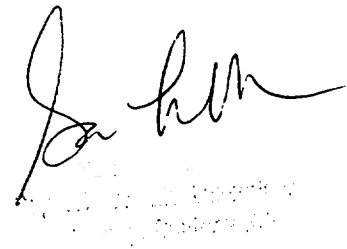
Art Unit: 2875

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-7724.

JC

A handwritten signature in black ink, appearing to read "Jacob Y Choi", with a stylized flourish at the end. Below the signature, there is a faint, circular official stamp or seal.